

### REMARKS

Applicants have amended the title of the application in response to the Examiner's comment in paragraph 6 of the March 29, 2006 office action.

Applicants disagree with the Examiner's objection in paragraph 7 of the March 29, 2006 office action. The relevant sentence from page 8 of the application is:

Carbon fluoride, which includes carbon monofluoride, polycarbon monofluoride, graphite fluoride or  $CF_x$ , is a solid, structural, non-stoichiometric fluorocarbon of empirical formula  $(CF_x)_n$  where  $0 < x < 1.25$ . One example of a  $CF_x$  material is grade 1000  $CF_x$  from Advance Research Chemicals (Catoosa, Oklahoma).

This sentence includes an explicit definition -- "[c]arbon fluoride... is a solid, structural, non-stoichiometric fluorocarbon of empirical formula  $(CF_x)_2$  where  $0 < x < 1.25$ ." A person of ordinary skill in the art, reading this definition, would understand that n is not defined because n can vary widely; see, for example, EP 1 156 544 ("EP '544") in col. 5, lines 49-54, which includes a somewhat broader definition (of "fluorinated carbon") but recognizes that n "can vary widely." Carbon monofluoride, polycarbon monofluoride, graphite fluoride, and  $CF_x$  are examples of carbon fluorides that fall under this definition.

Applicants have amended claims 20, 21, 26, and 33-39 to address the claim objections (for claim 39), double patenting (for claim 39), and 35 U.S.C. § 112, ¶ 2 rejection (of claims 20-23 and 25-40) of these claims.

Claim 19 is the only independent claim examined. Claim 19 has been amended to clarify that the cathode includes "a mixture of" the irreversible high capacity and the reversible low capacity material. See the examples in the application (e.g., at p. 11, lines 10-13) for specific support for "mixture".

There are three pending rejections of claim 19 -- under 35 U.S.C. § 102(b) in view of EP '544, under 35 U.S.C. § 102(a) in view of EP 1 326 295 ("EP '295"), and under 35 U.S.C. § 102(e) in view of Roy et al, 2003/0134188 ("Roy"). Applicants note that EP '295 and Roy do not qualify as prior art if the inventions covered by the pending claims were made prior to the publication date of EP '295 and the filing date of Roy. Applicants reserve the right to investigate this issue further later in prosecution if appropriate, but for now will assume that EP '295 and Roy qualify as prior art.

Applicant : William Bowden et al.  
Serial No. : 10/648,801  
Filed : August 27, 2003  
Page : 8 of 8

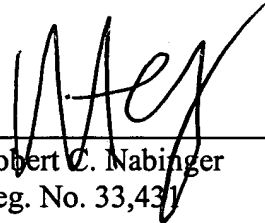
Attorney's Docket No.: 08935-282001 / M-5013

Applicants request that the 35 U.S.C. § 102 rejections be withdrawn. EP '544, EP '295, and Roy disclose cathodes of a sandwich design in which a layer including one cathode material is coated on one side of a current collector and a layer including a second cathode material is coated on the other side of the current collector. The two cathode materials are not mixed and EP '544, EP '295, and Roy, alone or in combination, do not suggest mixing the two materials together in a single layer or coating. In fact, mixing the two materials would wreck the sandwich design of the cathodes described by EP '544, EP '295, and Roy. Since claim 19 requires a mixture of the two relevant materials, claim 19 (and all claim dependent therefrom) are novel in view of EP '544, EP '295, and Roy.

Applicants submit the claims are in condition for allowance and such action is requested.

Enclosed is a \$120.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,



Robert C. Nabinger  
Reg. No. 33,431

Date: July 26, 2006

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906